FaxFinder® V.34 Fax Servers

1, 2, 4, or 8 Ports

Models: FF120
FF220
FF420
FF820

Cabling Guide

MultiTech® Systems

FaxFinder Model FF-120/220/420/820 Cabling Guide

P/N 82100261L, Revision B

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Record of Revisions

Revision	Date	Description
A	03/02/07	Initial Release of FF120 & FF220. Follows 82100060L Quick Start for FF-420/820.
B	04/16/07	Revise tech support contact listing.

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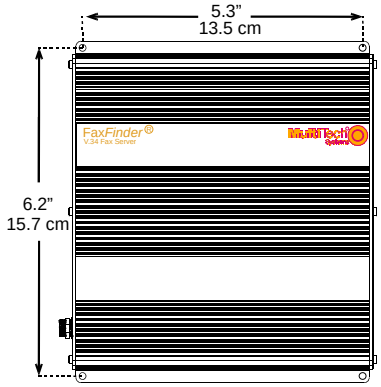
Introduction

This guide describes the hardware setup of the FF120, FF220, FF420, and FF820 FaxFinder units, that is, how to connect their cables for operation, and some preliminary considerations for their inter-operation with PBX units. Instructions for software setup can be found in the following chapters of the *Administrator User Guide*:

Chapter 3: Server Installation,
Chapter 5: FaxFinder Client Software Configuration, and
Chapter 8: Device Manager Installation & Operation.

Mechanical Mounting

The FF120 & FF220 FaxFinder can be surface mounted with screws spaced according to the dimensions shown. The FF420 & FF820 are normally table-top units but can be rack-mounted.



We Supply

- A FaxFinder (FF-120/220/420/820) with factory-installed software
- One power supply with power cord (builds of FF-120/220 for outside North America have a 2-piece power connection),
- Common telephone cables (1 for each port; RJ-11 at both ends)
- A product CD that contains: (a) a suite of software programs for client PCs, (b) a system management software package for the administrator's PC, and (c) additional documentation for both administrators and client/users
- A set of four self-adhesive rubber feet *(FF-120/220 only)*
- Rack-mounting fasteners *(FF-420/820 only)*
- This printed *Cabling Guide*

You Supply

- A nearby AC power outlet
- A connection to your Ethernet LAN
- Telephony connections (to match number of ports on unit)

  either - common subscriber (POTS) phone line jack(s)

  or - PBX station port(s) ***or*** - both
- An admin PC (with web browser) to configure the FaxFinder
- Client PCs (Windows NT/2000/XP) with email and printing applications and a PDF viewer (a TIFF viewer is provided). Network clients receive faxes in their email inboxes as

graphic file attachments. They will send faxes by printing to the FaxFinder server from application programs.

FaxFinder Operation

The FaxFinder Fax Servers provides two-way fax service to PC client users on an Ethernet network.

Fax Sending

For outgoing faxing, users send faxes by using the Print command of any application program and selecting the FaxFinder as the target Printer.

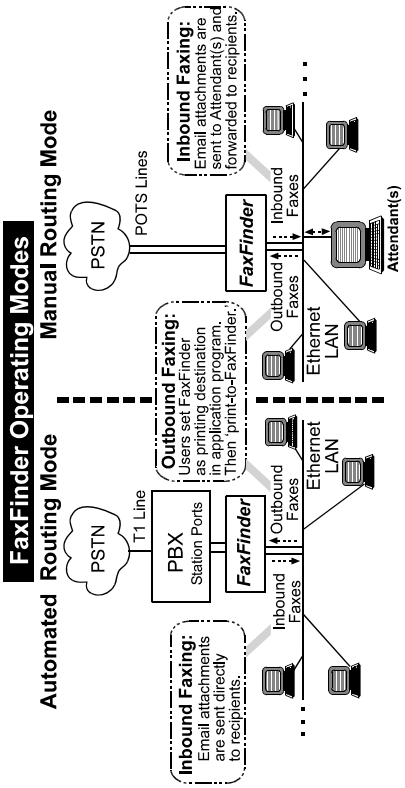
Fax Receiving: Automated vs. Manual Routing

For incoming fax service, the FaxFinder converts the incoming faxes into graphic files (PDF or TIF) that are sent as email attachments to fax recipients on the ethernet network. These emails may then either go directly to the recipient (Automated Routing Mode) or to an attendant who will forward them to their ultimate recipients (Manual Routing Mode).

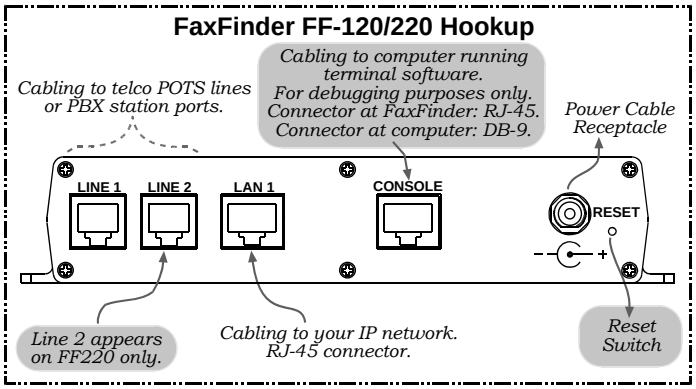
To use **Automated Routing Mode**, the FaxFinder must operate in conjunction with a PBX and the PBX must be able to route many incoming DID fax numbers to a group of station ports as DTMF digits. On the Multi-Tech website (look up “FaxFinder” under **Documents** and see *Configuration Guides*) we have a list of certified PBX configuration guides for FaxFinders. If you

believe that your PBX has the necessary DID routing capability but your PBX is not listed, contact Multi-Tech Technical Support (see page 2). In Automated Routing Mode, the line ports on the FaxFinder will be connected to the appropriate station ports on your PBX.

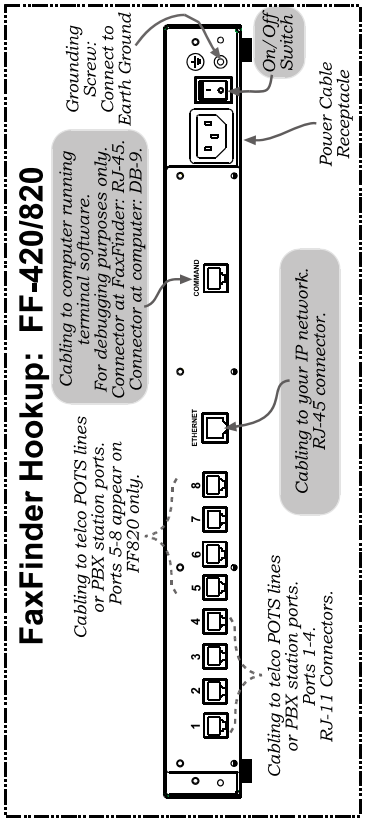
With **Manual Routing**, each phone line connected to the FaxFinder can have an email address assigned to it. In this case the POTS lines will be connected to the line ports on the FaxFinder.


FaxFinder Operating Modes
Automated Routing Mode
Manual Routing Mode
PSTN
T1 Line
PBX
Station Ports
FaxFinder
Inbound Faxes
Outbound Faxes
Ethernet LAN
Inbound Faxing:
Email attachments are sent directly to recipients.
Outbound Faxing:
Users set FaxFinder as printing destination in application program. Then 'print-to-FaxFinder.'
PSTN
POTS Lines
FaxFinder
Inbound Faxes
Outbound Faxes
Ethernet LAN
Attendant(s)
Inbound Faxing:
Email attachments are sent to Attendant(s) and forwarded to recipients.

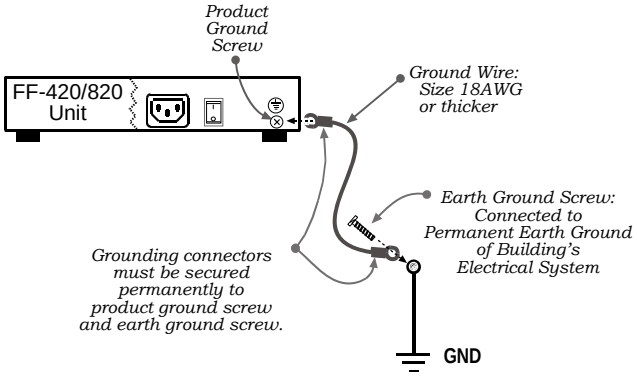
Quick Hookup for FF-120/220


FaxFinder FF-120/220 Hookup
Cabling to telco POTS lines or PBX station ports.
Cabling to computer running terminal software. For debugging purposes only. Connector at FaxFinder: RJ-45. Connector at computer: DB-9.
Power Cable Receptacle
LINE 1
LINE 2
LAN 1
CONSOLE
RESET
Line 2 appears on FF220 only.
Cabling to your IP network. RJ-45 connector.
Reset Switch

Quick Hookup for FF-420/820


FaxFinder Hookup: FF-420/820
Cabling to telco POTS lines or PBX station ports. Ports 5-8 appear on FF820 only.
Cabling to computer running terminal software. For debugging purposes only. Connector at FaxFinder: RJ-45. Connector at computer: DB-9.
Grounding Screw: Connect to Earth Ground
On/Off Switch
Power Cable Receptacle
Cabling to your IP network. RJ-45 connector.
Cabling to telco POTS lines or PBX station ports. Ports 1-4. RJ-11 Connectors.
COMMAND
ETHERNET
1
2
3
4
5
6
7
8

Earth Grounding for FF-420/820


Product Ground Screw
FF-420/820 Unit
Ground Wire: Size 18AWG or thicker
Earth Ground Screw: Connected to Permanent Earth Ground of Building's Electrical System
Grounding connectors must be secured permanently to product ground screw and earth ground screw.
GND

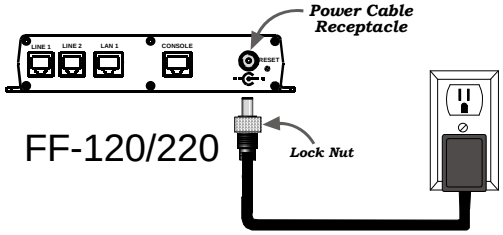
Cabling Process

Summary: Place the FaxFinder in a convenient location, and then connect it to your AC power outlet and Ethernet.

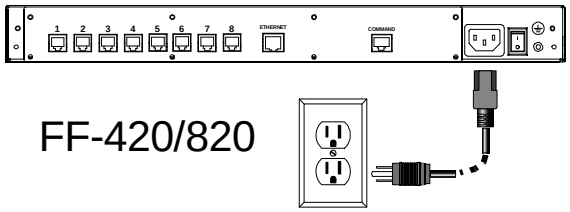
1. Connect FaxFinder to AC Outlet.

A. ***FF-120/220 Power***. Plug the DC power transformer into a power outlet or power strip. Secure the other end to the Power Receptacle on your FaxFinder. Secure the power cord to the connector with the lock nut. (Builds of FF-120/220 for outside North America have a 2-piece power connection.)

Caution: Use only the DC power transformer supplied with the FaxFinder. Use of any other transformer voids the warranty and can damage the FaxFinder.

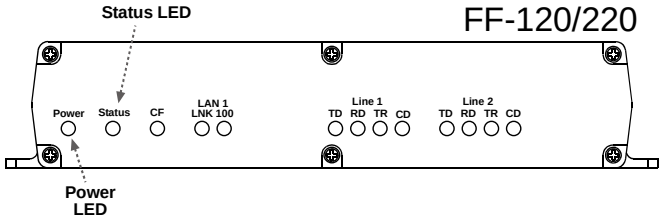


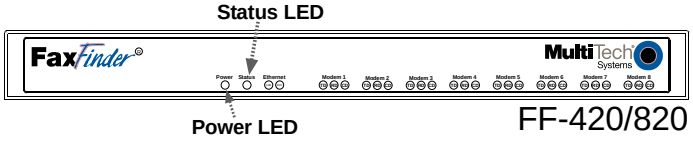
B. ***FF-420/820 Power***. Connect the power cable between the unit and a power outlet.



FF-420/820

2.Verify powering.



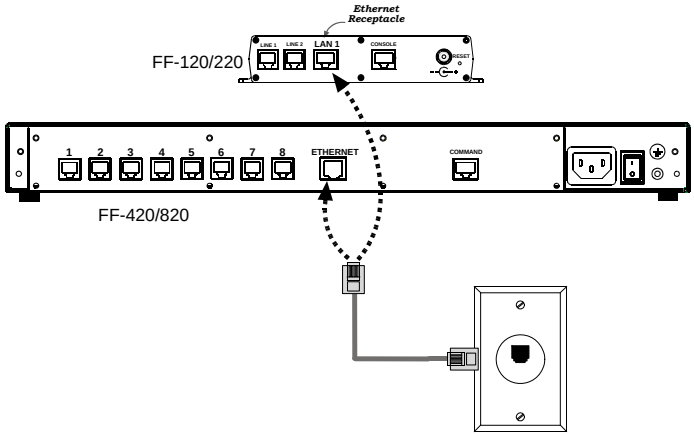


After power is applied, the **Power** LED comes on immediately but there is a 4-second delay before the **Status** LED comes on. In normal operation, the **Status** LED will be flashing.

When you apply power, the FaxFinder performs a diagnostic self-test. The **Status** indicator flashes when the test is complete and the unit is ready. If this does not happen, check that the power supply is solidly connected and that the AC outlet is live.

3. Connect FaxFinder to Ethernet Network.

Plug one end of your RJ45 ethernet cable into the FaxFinder's ethernet jack and the other end into your network ethernet hub. This ethernet cable is not included with your FaxFinder unit.



Caution: Before connecting to the Ethernet Network, make sure that the network to which you are connecting the FaxFinder is not a 192.168.2.x subnet. Because the FaxFinder's factory default IP address is 192.168.2.1, connecting it to a network that has a different device at that same IP address would cause data interference.

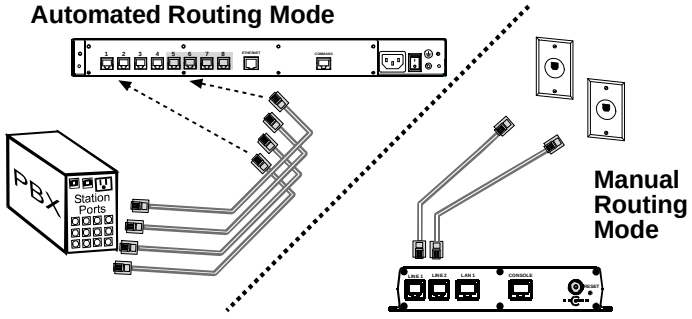
If it is a 192.168.2.x subnet, connect from the Administrative PC to the FaxFinder using an RJ45 crossover cable until the FaxFinder's IP address has been configured. Thereafter, connect the FaxFinder into the network with an ordinary RJ45 cable.

4. Connect to Telephony Service

The FaxFinder's fax modems can either be connected to a PBX (for use in **Automated Routing Mode**) or to a POTS line (for use in **Manual Routing Mode**).

Connection for Automated Routing Mode	Connection for Manual Routing Mode
Plug one end of the phone cable into the FaxFinder's LINE jack and the other into an available Station Port on the PBX.	Plug one end of the phone cable into the FaxFinder's LINE jack and the other end into your standard telephone receptacle.

One RJ11-to-RJ11 cable is included for each port of your FaxFinder (1 for FF120, 2 for FF220; 4 for FF420; 8 for FF820).



Patents

This device is covered by one or more of the following patents: 6,031,867; 6,012,113; 6,009,082; 5,905,794; 5,864,560; 5,815,567; 5,815,503; 5,812,534; 5,809,068; 5,790,532; 5,764,628; 5,764,627; 5,754,589; D394,250; 5,724,356; 5,673,268; 5,673,257; 5,644,594; 5,628,030; 5,619,508; 5,617,423; 5,600,649; 5,592,586; 5,577,041; 5,574,725; D374,222; 5,559,793; 5,546,448; 5,546,395; 5,535,204; 5,500,859; 5,471,470; 5,463,616; 5,453,986; 5,452,289; 5,450,425; D361,764; D355,658; D355,653; D353,598; D353,144; 5,355,365; 5,309,562; 5,301,274. Other patents pending.

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